

# **EXHIBIT 6**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

ADVANCED CODING TECHNOLOGIES LLC,	§	Case No. 2:24-cv-00572-JRG (LEAD CASE)
	§	
Plaintiff,	§	<b><u>JURY TRIAL DEMANDED</u></b>
	§	
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
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ADVANCED CODING TECHNOLOGIES LLC,	§	Case No. 2:24-cv-00687-JRG (MEMBER CASE)
	§	
Plaintiff,	§	<b><u>JURY TRIAL DEMANDED</u></b>
	§	
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

**PLAINTIFF'S SECOND AMENDED INITIAL AND  
ADDITIONAL DISCLOSURES TO DEFENDANT APPLE INC.**

Pursuant to Rules 26(a)(1) of the Federal Rules of Civil Procedure and the Court's Discovery Order (Dkt. 26) filed by the parties in this matter, Plaintiff Advanced Coding Technologies LLC ("ACT" or "Plaintiff") hereby makes the following initial disclosures to Defendant Apple Inc. ("Apple" or "Defendant"). ACT makes these disclosures based on information obtained to date and available to ACT. ACT reserves the right to amend and/or supplement these disclosures, pursuant to Rule 26(e) of the Federal Rules of Civil Procedure, as additional information becomes available during the course of this lawsuit.

ACT's initial disclosures are made without, in any way, waiving (i) the right to object to any discovery requests or to the admissibility of any evidence on the grounds of privilege, work product immunity, relevance, competency, materiality, hearsay, or any other proper ground in this action or in any other action; (ii) the right to object to the use of any such information, for any purpose, in whole or in part, in any proceeding in this action or in any other action; or (iii) the right to object to any and all grounds to any other discovery request or proceeding involving or relating to the subject matter of these disclosures in any proceeding in this action or in any other action.

ACT submits, based on information reasonably available to it at this time, and subject to the limitations set forth above, the following initial disclosures:

**(a) The Correct Name of the Parties to the Lawsuit**

ACT believes that the correct entities have been named as the Plaintiff and as the Defendant in this lawsuit.

**(b) The Name, Address, and Telephone Number of Any Potential Parties**

ACT is continuing its investigation into this issue and reserves the right to supplement this response and identify additional parties to the lawsuit. ACT is not presently aware of any potential parties.

**(c) Legal Theories and, in General, the Factual Bases of ACT's Claims or Defenses**

ACT has identified and will identify its legal theories in its forthcoming Disclosure of Asserted Claims and Infringement Contentions to be served in accordance with P.R. 3-1. ACT reserves the right to raise additional claims as discovery progresses and as the law in this area is developed further during the pendency of this litigation.

Defendant's Accused Products infringe certain Claims of U.S. Patent No. 8,090,025 (the "025 Patent"), U.S. Patent No. 9,986,303 (the "303 Patent"), U.S. Patent No. 10,218,995 (the "995

Patent”), U.S. Patent No. 9,042,448 (the “‘448 Patent”), U.S. Patent No. 8,230,101 (the “‘101 Patent”), and U.S. Patent No. 7,804,891 (the “‘891 Patent”).

To the extent Defendant allege that any limitations are not met literally, the Accused Products infringe the Asserted Patents under the doctrine of equivalents because the differences between the claimed inventions and the Accused Products, if any, are insubstantial, and directly infringe the Asserted Patents because they make, use, offer for sale, sell, and import into the United States the accused instrumentalities, as well as indirectly infringe by contributing to and/or inducing others (*e.g.*, Defendant’s suppliers, Defendant’s customers) to directly infringe those claims by making, using, offering for sale, or selling the Accused Products.

The Accused Products infringe the ’025 Patent because they comprise, among other things, a moving-picture decoding apparatus comprising: a demultiplexer to demultiplex coded data from an input signal based on a specific syntax structure, the input signal being obtained by multiplexing a coded bitstream obtained by predictive coding, border motion-vector data and post-quantization data obtained by quantization in the predictive coding, the coded bitstream obtained by producing and encoding a residual picture that is a residual signal between a picture to be coded that is an input moving-picture video signal to be subjected to coding and a predictive picture produced from a reference picture that is a local decoded video signal for each of a plurality of rectangular zones, finding a border, of the reference picture, having a boundary condition that matches the boundary condition, by motion-vector search in the reference picture, and generating the border motion-vector data that is data on a motion vector from a border of the rectangular zone in the picture to be coded to the border of the reference picture thus found, defining a boundary condition of a border that corresponds to the border motion vector data, from the reference picture based on the border motion-vector data, and generating an estimated video signal in each rectangular zone in the picture to be

coded, that satisfies Poisson's Equation, thus producing the predictive picture; an entropy decoder to perform entropy decoding to the data thus demultiplexed to generate, at least, motion-vector data, the post-quantization data, the border motion-vector data and parameter data required for constructing a specific syntax structure; an inverse-quantizer to perform inverse-quantization to the post-quantization data to generate post-quantization orthogonal transform coefficients data; an inverse-orthogonal transformer to perform inverse-orthogonal transform to the post-quantization orthogonal transform coefficients data to produce a decoded residual picture of one video area; a zone-border motion compensator to define a boundary condition of a border that corresponds to the border motion vector data, from the reference picture based on the border motion-vector data, and generate an estimated video signal in each rectangular zone in the picture to be coded, that satisfies Poisson's Equation, thus producing a first predictive picture; a combiner to combine the first predictive picture and the decoded residual picture to generate a decoded moving-picture signal; a memory to store the decoded moving-picture signal for at least one picture as a reference picture; a motion compensator to specify a corresponding rectangular zone in the reference picture based on the motion-vector data, thus generating a second predictive picture; a selector to select either the first predictive picture or the second predictive picture and supply the predictive picture thus selected to the combiner; and a decoding controller to receive decoding control data for decoding control from the parameter data and control the selector to switch the predictive picture to be supplied to the combiner between the first and second predictive pictures according to the decoding control data.

The Accused Products infringe the '303 Patent because they comprise, among other things, a video image coding data receiver comprising: a processor; and a memory unit having instructions stored which, when executed by the processor, cause the processor to perform operations comprising: receiving basic video image coding data; decoding the received basic video image coding data so as

to reproduce a video image; receiving supplementary video image coding data including a supplementary hierarchical picture whose coding order and display order are earlier by a factor of a group of pictures including an intra coded picture and a plurality of inter prediction coded pictures than those of a basic hierarchical picture included in the basic video image coding data, a basic hierarchy and a supplementary hierarchy being set in units of the group of pictures; acquiring basic video image coding data received before supplementary video image coding data that has been received at the moment; and reconstructing video image coding data from the basic video image coding data and the supplementary video image coding data.

The Accused Products infringe the '995 Patent because they comprise, among other things, a moving picture decoding system comprising: a demultiplexer configured to work on a sequence of input encoded bits to implement a process for a prescribed demultiplexing to output at least a first and a second sequence of encoded bits; a first decoder configured to acquire the first sequence of encoded bits obtained with a standard resolution at the demultiplexer to implement thereon a process for a prescribed first decoding to create a sequence of decoded pictures with a standard resolution; a first super-resolution enlarger configured to acquire the sequence of decoded pictures created with a standard resolution at the first decoder to work on the sequence of decoded pictures to implement an interpolation of pixels with a first enlargement to create a sequence of super-resolution enlarged decoded pictures with a first resolution higher than a standard resolution; a first resolution converter configured to acquire the sequence of super-resolution enlarged decoded pictures created at the first super-resolution enlarger to work on the sequence of super-resolution enlarged decoded pictures to implement a process for a prescribed resolution conversion to create a sequence of super-resolution decoded pictures with a standard resolution; a second decoder configured to acquire the second sequence of encoded bits obtained with a standard resolution at the demultiplexer as a set of decoding

targets, the sequence of decoded pictures created with the standard resolution at the first decoder as a set of first reference pictures, and the sequence of super-resolution decoded pictures created with the standard resolution at the first resolution converter as a set of second reference pictures, and select one of the set of first reference pictures and the set of second reference pictures based on reference picture selection information to implement a combination of processes for a prescribed prediction and a prescribed second decoding being a decoding with an extension of the standard resolution, to create a sequence of super-resolution pictures decoded with the standard resolution based on the set of decoding targets and the set of selected reference pictures; and a second resolution converter configured to acquire the sequence of decoded pictures with the standard resolution from the first decoder to work on the sequence of decoded pictures to implement an interpolation of pixels with the second enlargement to create a sequence of enlarged decoded pictures with a high resolution as a second resolution higher than the standard resolution, wherein the set of decoding targets, the set of first reference pictures, and the set of second reference pictures have the same value in spatial resolution.

The Accused Products infringe the '448 Patent because they comprise, among other things, a moving picture encoding system that makes an encoding of a sequence of moving pictures with a resolution higher than a standard resolution using moving pictures contents which include a sequence of moving pictures with the standard resolution and do not include a sequence of moving pictures with a resolution higher than the standard resolution, the moving picture encoding system comprising: a first encoder configured to work on a sequence of moving pictures with a standard resolution to implement a first combination of processes for an encoding and a decoding to create a first sequence of encoded bits and a set of decoded pictures with the standard resolution; a first super-resolution enlarger configured to work on the sequence of moving pictures with the standard 7

resolution to implement a process for a first super-resolution enlargement to create a set of super-resolution enlarged pictures with a resolution higher than the standard resolution; a second super-resolution enlarger configured to acquire the set of decoded pictures from the first encoder to implement thereon a process for a second super-resolution enlargement to create a set of super-resolution enlarged decoded pictures with a resolution higher than the standard resolution; a third resolution converter configured to acquire the set of decoded pictures from the first encoder to implement thereon a process for a third resolution conversion to create a set of resolution converted enlarged decoded pictures with a resolution higher than the standard resolution; and a third encoder configured to have the set of super-resolution enlarged pictures from the first super-resolution enlarger as a set of encoding target pictures, employing the set of super-resolution enlarged decoded pictures from the second super-resolution enlarger and the set of resolution converted enlarged decoded pictures from the third resolution converter as sets of reference pictures, to implement thereon a third combination of processes for a prediction and an encoding to create a third sequence of encoded bits, wherein a spatial resolution of the set of super-resolution enlarged pictures, that of the set of super-resolution enlarged decoded pictures, and that of the set of resolution converted enlarged decoded pictures are made equal; and wherein the third encoder controls a selection of a set of reference pictures and creates a set of data on the selection of the set of reference pictures to identify a selected set of reference pictures during the process for prediction of the third combination.

The Accused Products infringe the '101 Patent because they comprise, among other things, a server device for media, the server device for media comprising: an internal storage device for storing digital contents, wherein the server device for media responds to a data transmission request from a network player by stream-delivering corresponding data in corresponding digital contents from the internal storage device to the network player during connection to a network; a transfer control unit

adapted to transfer and store part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein said transfer control unit does not transfer, from the internal storage device to the network storage device, the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage device to the network storage device; a list information transmission unit adapted to respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device; a search unit adapted to respond to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored; and a digital contents data transmission processing unit adapted to allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device, wherein the server device for media is a media player. The Accused Products infringe the '891 Patent because they comprise, among other things, a communication quality judging device comprising: a symbol judging means for obtaining a baseband signal representative of a sequence of multilevel symbols and judging the symbol represented by the baseband signal; a communication quality judging means for judging communication quality of a transmission channel over which the baseband signal has been transmitted, based on content of the symbol judged by the symbol judging means; and a data changing means for, if the communication quality judged by the communication quality

judging means does not satisfy a predetermined condition, making a predetermined change to the data to be transmitted represented by the symbol used in the judgment, wherein at least a portion of a bit string is distinguished as a protected portion, the bit string constituting data to be transmitted represented by the sequence of symbols, and at least a portion of the symbol that belongs to the sequence of symbols contains a bit belonging to the protected portion and a redundant bit having a predetermined value, and wherein the communication quality judging means identifies the number of redundant bits having the predetermined value or the number of redundant bits missing the predetermined value among the redundant bits contained in the symbol that contains a bit belonging to the protected portion, and judges the communication quality of the transmission channel based on the identified result.

Defendant directly infringes by, among other things, making, using, selling, offering to sell, and importing the Accused Products. Defendant induces infringement by, among other things, providing these products to customers and ultimately to end-users for sale or use in an infringing manner in the United States including, but not limited to, using, or selling products that include infringing technology. Defendant has induced infringement by, among other things, instructing or otherwise inducing end-users and/or resellers of the Accused Products or products that incorporate the Accused Products to directly infringe by using or selling those products or by making, using, or selling products that incorporate the Accused Products, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end-users, infringe the patents-in-suit, but while remaining willfully blind to the infringement. Defendant contributorily infringes by, among other things, making, using, selling, offering to sell, and importing components of the Accused Products, including products that incorporate the Accused Products of those products, which have no substantial non-infringing uses.

Defendant's infringement has also been willful, at least because Defendant, with knowledge of the Asserted Patents and their infringement thereof, intentionally acted by continuing its infringement with willful and wanton disregard for Plaintiff's patent rights. Defendant has had actual notice of the '025 and '303 Patents from related prior litigations accusing products with similar AV1 functionalities involving direct competitors of Defendant. Defendant has been on actual notice of the '995 Patent and the '448 Patent and Defendant's infringement thereof at least as of June 3, 2013, when it was cited during prosecution. Defendant has had actual notice of the '101 and '891 Patents, at least as of the filing date of the First Amended Complaint.

ACT reserves the right to amend and/or supplement its infringement positions as discovery uncovers information regarding the Accused Products.

**(d) Individuals with Knowledge of Relevant Facts**

Based on currently known information, ACT believes that the following individuals are likely to have discoverable information regarding the parties' claims or defenses in this litigation, unless solely for the purposes of impeachment. These individuals are identified based upon ACT's current understanding of the parties' claims and defenses, and ACT expressly reserves the right to supplement, limit, or otherwise amend the list below as the case progresses. Any employee of ACT who is listed in these disclosures or in any supplement thereto may only be contacted through ACT's counsel of record.

NAME	SUBJECT
Deepak Sharma Managing Director Advanced Coding Technologies LLC  Mr. Sharma may be contacted through the offices of Advanced Coding Technologies LLC's counsel at Fabricant LLP, 411	Mr. Sharma is Managing Director of Advanced Coding Technologies LLC. Mr. Sharma is knowledgeable regarding the business operations of Advanced Coding Technologies LLC. Mr. Sharma further possesses knowledge regarding the ownership and licensing of the Asserted Patents.

NAME	SUBJECT
Theodore Fremd Avenue, Suite 206 South, Rye, NY 10580	
Hideki Takehara	Mr. Takehara is the inventor of the '303 Patent. Mr. Takehara is knowledgeable regarding the conception and reduction to practice of the '303 Patent.
Motoharu Ueda	Mr. Ueda is the inventor of the '303 Patent. Mr. Ueda is knowledgeable regarding the conception and reduction to practice of the '303 Patent.
Satoru Sakazume	Mr. Sakazume is the inventor of the '025, '995, and '448 Patents. Mr. Sakazume is knowledgeable regarding the conception and reduction to practice of the '025, '995, and '448 Patents.
Satoru Sekiguchi	Mr. Sekiguchi is the inventor of the '101 Patent. Mr. Sekiguchi is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Yoshio Sonoda	Mr. Sonoda is the inventor of the '101 Patent. Mr. Sonoda is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Isao Nakamura	Mr. Nakamura is the inventor of the '101 Patent. Mr. Nakamura is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Masamichi Furukawa	Mr. Furukawa is the inventor of the '101 Patent. Mr. Furukawa is knowledgeable regarding the conception and reduction to practice of the '101 Patent
Yoshihisa Mashita	Mr. Mashita is the inventor of the '101 Patent. Mr. Mashita is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Tomoaki Yoshida	Mr. Yoshida is the inventor of the '101 Patent. Mr. Yoshida is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Masahito Watanabe	Mr. Watanabe is the inventor of the '101 Patent. Mr. Watanabe is knowledgeable regarding the conception and reduction to practice of the '101 Patent.
Taichi Majima	Mr. Majima is the inventor of the '891 Patent. Mr. Majima is knowledgeable regarding the conception and reduction to practice of the '891 Patent.
JVC Kenwood Corporation  3-12, Moriyacho, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-0022, Japan	JVCKenwood Corporation may possess knowledge regarding the conception and reduction to practice, as well as ownership and licensing, of the Asserted Patents.
Apple employees	Apple employees are believed to have knowledge regarding the Accused Products.

NAME	SUBJECT
Alliance for Open Media  401 Edgewater Place Suite 600 Wakefield, MA 01880	Alliance for Open Media (“AOMedia”) is believed to have relevant knowledge regarding AV1 technology and the AV1 standard.
AGIS Software Development, LLC  100 W. Houston Street, Marshall, Texas 75670	AGIS Software Development, LLC may possess knowledge regarding negotiations and licensing agreements with Apple.
RFCyber Corp. 7700 Windrose Ave Unit 300 Plano, Texas 75024	RFCyber Corp. may possess knowledge regarding negotiations and licensing agreements with Apple.
Jawbone Innovations LLC  100 E. Houston Street, Marshall, Texas 75670	Jawbone Innovations LLC may possess knowledge regarding negotiations and licensing agreements with Apple.
Zhongli He  ACT believes Mr. He currently resides in Austin, TX.	Mr. He is the sole inventor of the U.S. Patent Application Publication No. 2008/0137753 (the “’753 Publication”), which was cited as prior art during an earlier litigation regarding the ’995 Patent and cited as a prior art reference in Inter Partes Review Trial No. IPR2024-00372. Mr. He is believed to be knowledgeable regarding the state of the art at the time of the invention of the ’995 Patent. Further, the assignee of the ’753 Publication was Freescale Semiconductor, Inc., located in Austin, TX, which merged with NXP Semiconductors in 2015
Dave Wilson, Graphics Software Engineer, Apple  Austin, TX	May have knowledge regarding Apple’s implementation of the AV1 and other video codecs for software applications.
Afshin Nourivand, SoC Design Verification Specialist  Austin, TX	May have knowledge regarding Apple’s implementation of hardware-based encoders and decoders for AV1 and other video codecs.
Fyodor Kyslov, Senior Software Engineer, Google  Austin, TX	May have knowledge regarding Apple’s decision to implement the AV1 video codec.
Sean Diaz, Director of Corporate Accounting, Samsung  Plano, TX	May have knowledge regarding the sales of licensed products by Samsung.

In addition to the above, ACT identifies all individuals listed on Apple's Initial Disclosures as Persons Likely to Have Knowledge or Discoverable Information that Apple may use to support its claims. ACT reserves the right to supplement this disclosure pursuant to Fed. R. Civ. P. 26(e) as its investigation continues.

**(e) Indemnity and Insurance Agreements**

At this time, ACT is not aware of any indemnity or insuring agreements under which any person or entity may be liable to satisfy part or all of any judgment entered in this action against ACT, or to indemnify or reimburse ACT for payments made to satisfy any such judgment.

**(f) Relevant Settlement Agreements**

ACT identifies the following agreements settling prior litigation involving one or both of the asserted patents. ACT's identification of a settlement agreement is not a representation or concession that the settlement agreement is relevant to the computation of damages or any other issue in this case.

Advanced Coding Technologies LLC executed settlement agreements with TikTok Inc., LG Electronics Inc., and Samsung Electronics Co. Ltd., and Samsung Electronics America, Inc.

**(g) Any Statement of Any Party to the Litigation**

At this time, ACT is aware of no statements on behalf of ACT other than those disclosed in the pleadings, initial disclosures, or other documents filed with the Court or served upon counsel of record in this litigation.

**(h) Computation of Damages**

ACT will disclose its computation of damages in accordance with the schedule for expert disclosures.

Dated: November 18, 2024

Respectfully submitted,

/s/ Peter Lambrianakos

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**ATTORNEYS FOR PLAINTIFF  
ADVANCED CODING TECHNOLOGIES LLC**

**CERTIFICATE OF SERVICE**

I hereby certify that on November 18, 2024, a true and correct copy of the above and foregoing document has been served by email on all counsel of record.

*/s/ Peter Lambrianakos*

Peter Lambrianakos